

Message

From: Wayne Miller [miller.wayne@azdeq.gov]
Sent: 9/18/2019 6:40:33 PM
To: D'Almeida, Carolyn [dAlmeida.Carolyn@epa.gov]; Davis, Eva [Davis.Eva@epa.gov]; catherine.jerrard@us.af.mil
CC: steve [steve@uxopro.com]; Bo Stewart [bo@praxis-enviro.com]; Jennings, Eleanor [eleanor.jennings@parsons.com]
Subject: 2019-9-18 - WAFB - FYI - ADEQ photo supplement ST012 sulfate solution non-hazardous spill summary
Attachments: 2019-1-10 - WAFB -UXO Pro notes -sulfate mixing -1-9-2019 ST012 EBR Site Visit- sw uxopro.pdf; 2019-8-21 - wafb - photos ST012 sulfate mixing tank tank 8-6-2019 puncture repair-.pdf

FYI - To help visualize the spill summary.....Attached is a Jan. 2019 mixing process summary submitted by UXO Pro showing the sulfate bag lift and dump process. Also a few ADEQ photos showing the repaired sulfate mix tank and the secondary containment.

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From: Smallbeck, Donald R. <donald.smallbeck@woodplc.com>
Date: Wed, Sep 18, 2019 at 9:05 AM
Subject: ST012 non-hazardous spill summary
To: JERRARD, CATHERINE V GS-13 USAF HAF AFCEC/CIBW <catherine.jerrard@us.af.mil>, Pearson, Stuart C. <stuart.pearson@woodplc.com>, William Hughes <William.Hughes@cn-bus.com>, d'Almeida, Carolyn K. <dAlmeida.Carolyn@epa.gov>, Wayne Miller <Miller.Wayne@azdeq.gov>, Davis, Eva <Davis.Eva@epa.gov>, Dan Pope <DPope@css-inc.com>, Jennings, Eleanor <Eleanor.Jennings@parsons.com>, Brasaemle, Karla <KBrasaemle@techlawinc.com>, Goers, Nicole <Nicole.Goers@techlawinc.com>, GANGNUSS, GREGORY G GS-14 USAF HAF AFCEC/CIBW <gregory.gangnuss@us.af.mil>, steve@uxopro.com <steve@uxopro.com>, Bo Stewart <bo@praxis-enviro.com>

On behalf of the Air Force, please find below a complete summary of the ST012 non-hazardous spill.

BCT members

Below is a summary of the sulfate mix tank spill incident. The spill was treatment system processed water prior to sulfate mixing (i.e. background sulfate groundwater concentrations in the 300 mg/l range). Preliminary information was previously provided in the August BCT conference call.

On August 6, 2019 there was a spill from the ST012 sulfate mix tank. During routine mixing operations which require a reach forklift to lift a 2,000 pound super sack of industrial grade sodium sulfate above the mix tank, the straps on the supersack failed and the full supersack of sodium sulfate fell into the tank. The tank had been filled with 6,000 gallons of treated water prior to the supersack of sodium sulfate falling into the tank. The forklift operator attempted to use the forks of the forklift to retrieve the bag from the sulfate tank and upon doing so punctured the tank causing approximately 4,000 gallons of treated water to be released from the tank. Approximately 3,500 gallons of the 4,000 gallons released were recovered via secondary containment and pumping into the groundwater treatment system equalization tank. After the spilled treated groundwater was recovered, the remaining water in the mix tank was pumped over to the equalization tank. The block of sulfate was in contact with treated water at the top of the bag as the top of the bag was ripped in addition to the straps. Very little of the sulfate dissolved into the treated water that was spilled. The bag was purposely ripped further using a pole with a hook on it that was also used to remove the bag. The solid sodium sulfate remained in the tank during the tank repair. Following the repair completion, the tank was refilled and mixed to dissolve the sodium sulfate. In accordance with the Spill Plan and Wood policy, a soil sample of the area impacted by the spill was collected and the results of detected compounds are in the table below.

Sample	Sample Name	Specific Method	Analyte	Result	Units	Qualifier	Limit
280-127386-1	ST012-MixTankSpill	Moisture	Percent Moisture	9.6	%		0.1
280-127386-1	ST012-MixTankSpill	8260_DoD	Toluene	0.31	ug/Kg	J	0.22
280-127386-1	ST012-MixTankSpill	8015_DRO_DOD	Diesel Range Organics [C10-C28]	42	mg/Kg	Q	4.0
280-127386-1	ST012-MixTankSpill	9056A_28D_DOD	Sulfate	740	mg/Kg	J1	9.8
280-127386-1	ST012-MixTankSpill	9056_48H_DOD	Nitrate as N	8.3	mg/Kg		0.90

J – Estimated: The analyte was positively identified. The quantitation is an estimation.

Q – One or more quality control criteria failed.

J1 – Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte specific quality control criteria.

D.R. Smallbeck

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